Claims

- 1. A royal jelly peptide characterized by having at least any function activity of a function as a queen bee differentiation inducing cofactor, and a function as an animal immunity activating factor.
- 2. An expression vector including an expression cassette having a gene sequence coding for the royal jelly peptide according to claim 1.
 - 3. A transgenic cell transformed by the expression vector according to claim 2.
 - 4. A royal jelly peptide produced by the transgenic cell according to claim 3.
- 5. A composition containing the royal jelly peptide according to claim 1 or 4 as an effective component, characterized by having at least any function of a function of improving the auxiliary effect of inducing differentiation of honeybees to queen bees, and a function of improving the animal immunity activating effect.
- 6. A method for inducing honeybees to queen bees characterized by administering the composition according to claim 5 to honeybee larvae, thereby promoting the growth of the larvae, and inducing differentiation to queen bees.
- 7. A method for activating the animal immunity, characterized by administering the composition according to claim 5 to an animal, and thereby improving the animal immunity activating effect.
- 8. The transgenic organisms being a non-human organism obtained by ontogenesis of any of an early embryo, a fertilized egg, and an embryonic stem cell of a non-human organism into which a gene sequence coding for the royal jelly peptide according to claim 1 has been transferred, and a progeny organism thereof, characterized by having the gene in a somatic cell chromosome, and expressing the royal jelly peptide.
 - 9. The non-human organism according to claim 8, characterized in that the

non-human organism is any of a plant or an animal.

- 10. The non-human organism according to claim 9, characterized in that the animal is an insecta.
- 11. The non-human organism according to claim 10, characterized in that the insecta is a silkworm.